

73099-463

2/4/2013

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UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
WASHINGTON, D.C. 20460

OFFICE OF CHEMICAL SAFETY
AND POLLUTION PREVENTION

FEB - 4 2013

Mr. Nasser Assaf, Ph.D.
Valent BioSciences
870 Technology Way, Suite 100
Libertyville, IL 60048

Dear Dr. Assaf:

Subject: Amendment- new primary eye study MRID 48942803
Pramex 10-10
EPA Registration Number 73049-463
Your submission dated September 17, 2012 and January 24, 2013

The application referred to above, submitted in connection with registration under the Federal Insecticide, Fungicide, and Rodenticide Act, as amended, is acceptable with the following comments:

1. Replace the Hazards to Humans and Domestic Animals section with "Causes moderate eye irritation. Harmful if swallowed. Avoid contact with eyes, skin or clothing. Prolonged or frequently repeated skin contact may cause allergic reactions in some individuals. Wash thoroughly with soap and water after handling and before eating, drinking, chewing gum, using tobacco or using the toilet. Wear Long-sleeved shirt and long pants, socks, shoes and chemical resistant gloves."

A copy of the label is enclosed for your records.

A copy of the review is enclosed for your records.

Your basic and alternate#1 Confidential Statement of Formulas (CSFs) dated January 24, 2013 have been reviewed and are acceptable

If you have any questions regarding this action, please contact Linda A. DeLuise of my team at (703) 305-5428.

Sincerely yours,

Handwritten signature of Richard Gebken in black ink.

Richard Gebken
Product Manager (10)
Insecticide Branch
Registration Division (7505P)

Enclosures

PRAMEX® 10-10*For Misting Systems*

- [For use in automatic spray systems
- For use in automatic spray systems in residential backyards
- For use in automatic spray systems in [residential backyards] animal quarters, horse & cattle barns, dairy and beef barns, dairies, milking parlors, swine housing, poultry houses and warehouses
- Kills mosquitoes that may cause West Nile virus and [Eastern] [Western] [And] St. Louis Equine Encephalitis
- Will not harm most [common] ornamentals
- May also be used on animals and animal premises]

ACTIVE INGREDIENTS:

Permethrin*..... 10.0%

Piperonyl butoxide**.....10.0%

OTHER INGREDIENTS:.....80.0%

100.0%

* Cis-trans isomers ratio: Min. 35% (+ or -) cis and Max. 65% (+ or -) trans

** (butylcarbityl) (6-propylpiperonyl) ether related compounds

**ACCEPTED
with COMMENTS
In EPA Letter Dated
2/4/2013**
Under the Federal Insecticide,
Fungicide, and Rodenticide Act,
as amended, for the pesticide
registered under EPA Reg. No.
73049-463

Contains 0.856 lbs. of Permethrin per gallon.

EPA Reg. No. 73049-463

EPA Est. No.

**KEEP OUT OF REACH OF CHILDREN
CAUTION**

See Side/Back panel for additional first aid and precautionary statements.

FIRST AID	
If in eyes:	<ul style="list-style-type: none"> • Hold eye open and rinse slowly and gently with water for 15-20 minutes. • Remove contact lenses if present, after the first 5 minutes, then continue rinsing. • Call a poison control center or doctor for treatment advice.
If swallowed:	<ul style="list-style-type: none"> • Call a poison control center or doctor immediately for treatment advice. • Have person sip a glass of water if able to swallow. • Do not induce vomiting unless told to do so by the poison control center or doctor. • Do not give anything by mouth to an unconscious person.
If on skin or clothing:	<ul style="list-style-type: none"> • Take off contaminated clothing. • Rinse skin immediately with plenty of water for 15-20 minutes. • Call a poison control center or doctor for treatment advice.
HOT LINE NUMBER	
Have the product container or label with you when calling a poison control center or doctor, or going for treatment. For additional information on this product (including health concerns, medical emergencies or pesticide incidents), you may call 1-877-315-9819, twenty-four (24) hours per day, seven (7) days per week.	

Net Contents:

**PRECAUTIONARY STATEMENTS
HAZARDS TO HUMANS AND DOMESTIC ANIMALS**

CAUTION: Causes moderate eye irritation. Avoid contact with eyes or clothing. Harmful if swallowed. Avoid contact with skin. Prolonged or frequently repeated skin contact may cause allergic reactions in some individuals. Wash hands thoroughly with soap and water after handling and before eating, drinking, chewing gum, using tobacco, or using the toilet. Remove and wash contaminated clothing before reuse.

PERSONAL PROTECTIVE EQUIPMENT (PPE)

Some materials that are chemical-resistant to this product are listed below. Mixers, loaders, applicators and other handlers, (including during mixing/loading, repair and cleaning of equipment and disposal of pesticide) must wear the following:

- Long-sleeved shirt and long pants
- Chemical resistant gloves made of any waterproof material
- Shoes plus socks

In addition to the above PPE, applicators using high-pressure handwand in an enclosed area must wear at least a NIOSH-approved respirator with a dust/mist filter with MSHA/NIOSH approval prefix TC-21C or any N, R, P, or HE filter.

Applicators using hand-held foggers or fog/mist generators in indoor spaces must wear coveralls over long-sleeved shirt and long pants, chemical-resistant gloves made of any waterproof material, chemical-resistant footwear plus socks, chemical-resistant headgear, if overhead exposure, and a half-face, full-face or hood style NIOSH-approved respirator with a dust/mist filtering cartridge (MSHA/NIOSH approval number prefix TC-21C), or a cartridge or canister approved for pesticides (MSHA/NIOSH approval number prefix TC-14G), or a cartridge or canister with any N, R, P, or HE filter.

In addition to the above PPE, mixers, loaders, applicators and other persons exposed to this product's concentrate, or handlers performing animal dip applications, must wear a chemical-resistant apron.

User Safety Recommendations:

- Users should wash hands before eating, drinking, chewing gum, using tobacco or using the toilet.
- Users should remove clothing/PPE immediately if pesticide gets inside. Then wash thoroughly and put on clean clothing.
- Users should remove PPE immediately after handling this product. Wash the outside of gloves before removing. As soon as possible, wash thoroughly and change into clean clothing.
- Follow manufacturer's instructions for cleaning/maintaining PPE. If no such instructions for washables exist, use detergent and hot water. Keep and wash PPE separately from other laundry.
- Discard clothing and other absorbent materials that have been drenched or heavily contaminated with this product's concentrate. Do not reuse them.

ENVIRONMENTAL HAZARDS

This pesticide is extremely toxic to aquatic organisms, including fish and invertebrates. Do not apply directly to or near water, or to areas where surface water is present or to intertidal areas below the mean water mark. Do not apply when weather conditions favor drift from treated areas. Drift and run-off from treated areas may be hazardous to aquatic organisms in water adjacent to treated areas. Do not contaminate water when disposing of equipment wash waters. See Directions for Use for additional precautions and use restrictions.

Under some conditions, this product may also have a potential for transport into surface water in run-off (primarily adsorbed to suspended soil particles), for several months or more after application. These include poorly draining or wet soils with readily visible slopes toward adjacent surface waters, frequently flooded areas and areas overlying extremely shallow ground water, areas with in-field canals or ditches that drain to surface water, areas not separated from adjacent surface waters with vegetated filter strips and areas over-lying tile drainage systems that drain to surface waters.

This pesticide is highly toxic to bees exposed to direct treatment on blooming crops or weeds. Do not apply this product or allow it to drift to blooming crops or weeds while bees are actively visiting the treatment area.

4/12

[Containers equal or greater than 5 gallons or 50 pounds:]

[Do not discharge effluent containing this product into lakes, streams, ponds, estuaries, oceans or other water unless in accordance with the requirement of a National Pollutant Discharge Elimination System (NPDES) permit and the permitting authority has been notified in writing prior to discharge. Do not discharge effluent containing this product into sewer systems without previously notifying the local sewage treatment plant authority. For guidance, contact your State Water Board or Regional Office of the EPA. See Directions for Use for additional precautions and restrictions.]

PHYSICAL OR CHEMICAL HAZARDS

Do not use this product in or on electrical equipment due to possibility of shock hazard.

DIRECTIONS FOR USE

It is a violation of Federal law to use this product in a manner inconsistent with its labeling.

READ THIS LABEL IN ITS ENTIRETY BEFORE USING.

FOR PET USE – USE ONLY ON DOGS OR PUPPIES OVER 12 WEEKS OF AGE.

USE RESTRICTIONS:

- Apply this product only as specified on this label.
- Do not apply to puppies less than 12 weeks old.
- **DO NOT USE ON CATS OR KITTENS.** Do not treat cats or their bedding. This product may be toxic or potentially fatal if applied to or ingested by cats or kittens.
- Application with aerial or motorized ground equipment is prohibited.
- Do not use spoons or measuring cups for food purposes after use with pesticides.
- Do not use in food areas of restaurants or food handling establishments or other areas where food is commercially prepared or processed. Do not make space spray applications in serving areas while food is exposed or facility is in operation. Serving areas are areas where prepared foods are served such as dining rooms, but excluding areas where foods may be prepared or held. When used in the home, cover or remove all exposed food and cooking utensils and cover all food-processing surfaces or wash thoroughly after treatment and before re-use.
- Do not contaminate food or feedstuffs.
- Except when applying to pets or livestock or through outdoor residential misting systems, do not apply this product in a way that will contact workers or other persons, either directly or through drift. Do not breathe vapors or spray mist.
- Except when applying to pets or livestock or through outdoor residential misting systems, do not enter or allow others to enter until vapors, mists and aerosols have dispersed and the treated area has been thoroughly ventilated.
- Except when applying to pets or livestock or through outdoor residential misting systems, do not apply this product in a way that will contact adults, children or pets, either directly or through drift.
- Except when applying to pets or livestock or through outdoor residential misting systems, only protected handlers may be in the area during application.
- Do not remain in treated area. Exit area immediately and remain outside the treated area until vapors, mists and aerosols have dispersed.
- Remove or cover exposed food and drinking water before application.
- Do not use in aircraft cabins.
- Application is prohibited directly into sewers or drains, or to any area like a gutter where drainage to sewers, storm drains, water bodies, or aquatic habitat can occur. Do not allow this product to enter any drain during or after application.
- Do not make applications during rain.
- Do not wet plants to the point of run-off or drip.
- Do not wet articles to the point of run-off or drip. Do not use treated article until spray has dried. Dry clean treated clothing before wearing.
- When used in dairy barns or facilities: Close milk bulk tank lids to prevent contamination from dead or falling insects. Remove or cover milking utensils before application. Wash teats of animals before milking.
- For direct application to non-domestic animals/livestock: Do not apply more than 1 time per day.
- All outdoor applications must be limited to spot or crack-and-crevice treatments only, except for the following

permitted uses: (1) Treatment to soil or vegetation around structures; (2) Applications to lawns, turf and other vegetation; (3) Applications to building foundations up to a maximum height of 3 feet. Other than applications to building foundations, all outdoor applications to impervious surfaces such as sidewalks, driveways, patios, porches and structural surfaces (such as windows, door and eaves) are limited to spot and crack-and-crevice applications only.

- Remove pets, birds and cover fish aquariums before spraying. Turn off aquarium filtering systems before spraying and wait approximately 15 minutes after application before turning the filter back on.
- This product is not for use on plants being grown for sale or other commercial use. This product should not be used for research purposes, for commercial seed production, for commercial nursery use or forestry use.

When diluting, add the correct [required] amount of Pramex 10-10 to water as directed and blend thoroughly. For use both indoors (in homes) and outdoors. May be used in non-food areas of commercial buildings, warehouses, food/feed processing establishments, institutions, schools, office buildings, hotels, motels, restaurants, theaters, hospitals, horse barns, swine [houses] and poultry houses, milking parlors, dairies, cattle barns and kennels. Examples of non-food areas are: lavatories, offices, locker rooms, garbage rooms, entries and vestibules, machine rooms, boiler rooms, garages, mop closets and storage rooms/closets (after canning or bottling).

For maximum effectiveness, a combination of space treatment and localized application is recommended.

Note: In the chart below, the number in the 3rd column refers to the level of Permethrin in the final diluted product. The rates on this label make the ready-to-use products listed below.

DILUTION RATE	OUNCES OF PRAMEX 10-10 CONCENTRATE/GALLON	% PERMETHRIN IN DILUTED PRODUCT
1:19	6.40	0.50%
1:39	3.20	0.25%
1:100	1.28	0.10%
1:200	0.64	0.05%
1:400	0.32	0.025%

WHEN USING INDOORS:

SURFACE SPRAY APPLICATION METHODS:

Insects Controlled	Directions for Use	Dilution Instructions
Cockroaches, Water bugs, Palmetto Bugs, Ants, Silverfish, Firebrats, Spiders, Crickets, Millipedes, Centipedes, Sowbugs, Pillbugs, Clover Mites, Cheese Mites, Granary Weevils, Rice Weevils, Confused Flour Beetles, Rust Red Flour Beetles, Saw-Toothed Grain Beetles, Spider Beetles, Cigarette Beetles, Drug Store Beetles, Darkling Beetles, Mealworms, Grain Mites, Cadelles, and Lesser Houseflies and other manure breeding flies	Adjust your sprayer to deliver a coarse wet spray. Direct the spray into cracks and crevices, insect hiding places, behind shelves and drawers, under pallets, around containers of stored foods, and around the base of machinery. Spray ant trails, nests and points of entry. Spray bookcases for silverfish. Only when used as a surface application, spray floors, walls and other surfaces.	For initial clean up of severe infestation, dilute at a rate of 1 part <i>Pramex 10-10</i> concentrate in 19 parts water (6.4 fluid ounces per gallon). This makes a 0.5% permethrin ready to use product.
Centipedes, Ground Beetles, Pillbugs, Sowbugs, Scorpions and Ticks	Apply around windows and doors as well as other places where these insect pests may enter premises. Treat storage areas, baseboards, and other places where these pests may hide.	For normal infestation, dilute 1 part <i>Pramex 10-10</i> concentrate in 39 parts water (3.2 ounces per gallon). This makes a 0.25% permethrin ready to use product.
Carpet Beetles	Spray edges of and under carpeting and rugs. Make localized application to baseboards and floors. Spray directly into cracks and crevices, closets and infested areas of shelving.	For maintenance use, dilute 1 part <i>Pramex 10-10</i> concentrate in 100 parts water (1.28 ounces/gallon or 8 teaspoons/gallon). This makes a 0.1% permethrin ready to use product.

Flying Insect places where they rest or land (helps in controlling insects such as Gnats, Mosquitoes, Skippers, Boxelder Bugs, Asian Lady Beetles)	Treat walls, ceilings, moldings, screens, door and window frames and similar resting places.	Dilute at a rate of 1 part <i>Pramex 10-10</i> concentrate in 19 parts water (6.4 fluid ounces per gallon). This makes 0.5% permethrin ready-to-use product).
Bed Bugs	Before treating, spray fabric in an inconspicuous area to test for possible staining or discoloration. Inspect again after drying. If no staining occurs, continue by spraying mattresses lightly, particularly around tufts and seams. Take beds apart and spray in all joints. Treat baseboards, moldings, and floors. Allow all treated articles to thoroughly dry before use.	For initial clean up of severe insect infestation, dilute at a rate of 1 part <i>Pramex 10-10</i> concentrate in 19 parts water (6.4 fluid ounces per gallon). Makes a 0.5% permethrin ready to use product.
Clothes Moths	Remove infested items from storage, brush thoroughly and if possible, air for a few hours, preferably in sunlight. Liberally apply spray to empty closets, chests, dressers and other storage areas by directing the spray into cracks, crevices and joints. After airing, infested items may be treated lightly, keeping nozzle at least 3 feet from fabric to avoid staining.	For normal infestations, dilute 1 part <i>Pramex 10-10</i> concentrate in 39 parts water (3.2 ounces per gallon). Will make a 0.25% permethrin ready to use product.
Lice and Louse Eggs (on inanimate objects)	Prior to using, spray in an inconspicuous area to test for possible staining or discoloration. Inspect again after drying. Spray from a distance of 8 to 10 inches. Treat only those garments and parts of bedding, including mattresses and furniture that cannot be either laundered or dry-cleaned.	For maintenance use, dilute 1 part <i>Pramex 10-10</i> concentrate in 100 parts
Fleas, Flies, Ticks, Lice and Mange Mites (adults and larvae) in kennels, shelters, doghouses, runs and yards	Allow all treated articles to dry thoroughly before use. Test delicate fabrics in an inconspicuous area prior to use. Thoroughly spray infested areas, pet beds, resting quarters, nearby cracks and crevices, along and behind baseboards, moldings, window and door frames and localized areas of floor and floor coverings (rugs and carpets). Fresh bedding should be placed in animal quarters once spray has dried. Adult fleas and larvae contacted by spray will be killed. Do not treat cat bedding.	water (1.28 ounces per gallon or 8 teaspoons per gallon). Makes a 0.1% permethrin ready to use product.

7/12

SPACE SPRAY APPLICATION METHODS:

Insects Controlled	Directions for Use	Dilution Rate
Houseflies, Fruit Flies, Gnats, Mosquitoes, Skipper Flies, Wasps, Hornets, Bees, Black Flies, Asian Lady Beetles, Boxelder Bugs, Angoumois Grain Moths, and Tobacco Moths	<p>Apply with non thermal mechanical or compressed air equipment that is adjusted to deliver a fine mist. Close doors and windows and shut off ventilating systems, including air conditioners. Direct spray at an upward angle distributing it uniformly through the entire area at a rate of 1 ounce per 1,000 cubic feet of space. Vacate after treatment and keep area closed for at least 10 minutes then ventilate and sweep up dead insects before occupying.</p> <p>For quick kill of accessible or exposed stages of other insects named on this label. Apply using conventional non thermal mechanical or compressed air equipment. Follow space spraying directions. Apply dilutions at a rate of 1 ounce per 1,000 cubic feet of space.</p>	<p>For initial clean up of severe insect infestation, dilute at a rate of 1 part <i>Pramex 10-10</i> concentrate in 19 parts water (6.4 fluid ounces per gallon). Makes a 0.5% permethrin ready to use product.</p> <p>For normal infestations, dilute 1 part <i>Pramex 10-10</i> concentrate in 39 parts water (3.2 ounces per gallon). Will makes a 0.25% permethrin ready to use product.</p> <p>For maintenance use, dilute 1 part <i>Pramex 10-10</i> concentrate in 100 parts water (1.28 ounces per gallon or 8 teaspoons/gallon). Makes a 0.1% permethrin ready to use product.</p>

OUTDOOR USE AREAS

Drive-In Theaters, Drive-In Restaurants, Gardens, Homes, Parks, Playgrounds, Recreational Areas, Golf Courses, Feed Lots Corrals, Swine Lots, Zoos and Urban Areas.

PREMISE SPRAY APPLICATION METHODS:

Insects Controlled	Directions for Use	Dilution Rate
Mosquitoes, Wasps, Hornets, Yellow Jackets Annoyance Flies and Skippers	Treat walls, ceilings, moldings, screens, door and window frames, and similar resting places. Application should be made prior to occupancy. Cover any exposed food, water, drinking fountains and animal feed before application. In zoos, prevent reptiles from exposure to this product.	Dilute 1 part <i>Pramex 10-10</i> concentrate in 39 parts water (3.2 fluid ounces per gallon of water). This will make a 0.25% permethrin ready to use product.
Gypsy Moth Caterpillars and Adults, Adult Japanese Beetles, Eastern and Forest Tent Caterpillars, Mole Crickets and Grasshoppers	<p>Apply to insure thorough coverage of upper and lower leaf surfaces. Thoroughly wet down grass a few hours before applying. Lawns should not be higher than 3 inches at time of treatment. Wet lawns with 1/4 inch of water immediately after application. For heavy infestations, repeat application after 2 weeks.</p> <p>Treat trees and shrubs as soon as insects emerge (usually late spring). Spray leaves, branches, and tree trunks evenly. Make sure to penetrate dense foliage. Repeat application every 7 days as necessary for control.</p> <p>On roses and in flower gardens: Treat plants and flowers as soon as insects appear. Spray flowers and plants making sure to penetrate dense foliage. Repeat application every 7 days or as necessary for control.</p>	<p>Dilute 1 part concentrate in 39 parts water (3.2 fluid ounces per gallon of water). Makes a 0.25% permethrin ready to use product.</p> <p>Mix 1.28 fl. oz. per gallon of water and treat 1,000 sq. ft. Slightly more water may be used provided the amount of product per area is the same.</p>
Fire Ants	Using equipment such as a garden sprinkling can, gently apply at the rate of one gallon per mound. Thoroughly wet the mound and surrounding area to a diameter of 4 feet. For best results, apply in cool weather, 65° to 80°F, or in early morning or late evening hours. Treat new mounds as they appear. Do not disturb the mound prior to treatment. Treat all mounds in the vicinity and treat all colonies, which have not yet built mounds. Do not use equipment that produces a pressurized spray since this will disturb Fire Ants and cause migration, reducing the effectiveness of this product.	Mix 6.4 fl. oz. in 1 gallon of water.

Ants, Crickets, Earwigs, Fleas and Ticks	For localized infestations where there are weeds or bushy non-crop areas, spray infested areas thoroughly. For Ants, thoroughly wet hills and runways.	For severe infestation, dilute 1 part <i>Pramex 10-10</i> concentrate in 19 parts water (6.4 oz. per gallon of water). Will make a 0.5% permethrin ready to use product. <i>Also</i> treat 400 linear feet with a 6-inch spray band.
Clover Mites, Millipedes, Sowbugs (Pillbugs)	To help prevent infestation of buildings, treat the building foundation to a height of 2 to 3 feet where insects are active and may find entry. Apply also as a residual spray to outside surfaces of buildings, garages, patios, and other areas where these pests may be found.	For normal infestations, dilute 1 part <i>Pramex 10-10</i> concentrate in 39 parts water (3.2 oz. per gallon). Makes a 0.25% permethrin ready to use product.
Armyworms, Cutworms, Chinch Bugs, Sod Webworms	Thoroughly wet down grass a few hours before applying. Lawns should be no higher than 3 inches at time of application. Delay watering or mowing for 24 hours after treatment. For heavy infestation, repeat application after 2 weeks.	Mix 3.2 fluid ounces per gallon of water and treat 1,000 sq. ft. Slightly more water may be used as long as the amount of product per area is the same.

ANIMALS AND ANIMAL PREMISE USE AREAS

Cattle Barns, Milk Rooms & Parlors, Dairies, Horse Barns, Poultry Houses, Swine Houses, and Kennels.

This product may be used on Dairy and Beef Cattle, Sheep, Goats, Swine, Horses, Poultry and Dogs.

Insects Controlled	Directions for Use	Dilution Rate
Horn Flies, Houseflies, Mosquitoes and Gnats	Wet the hair thoroughly, paying particular attention to topline, underline, flanks, withers and other infested areas. Repeat treatment at intervals of 5 to 12 days for small insect populations or as needed when flies are emerging in large numbers.	For clean up of severe insect infestation, dilute at a rate of 1 part <i>Pramex 10-10</i> concentrate in 100 parts water (1.28 ounces per gallon or 8 teaspoons/gallon). Makes a 0.1% permethrin ready-to-use product. For normal infestations, dilute 1 part <i>Pramex 10-10</i> concentrate in 200 parts water (0.64 ounces per gallon or 4 teaspoons per gallon) Makes a 0.25% permethrin ready-to-use product. For maintenance use, dilute 1 part <i>Pramex 10-10</i> concentrate in 400 parts water (0.32 ounce per gallon or 2 teaspoons per gallon). Makes a 0.025% permethrin ready-to-use product.
Stable Flies, Horse Flies and Deer Flies	Apply a quart per adult animal to wet the hair thoroughly with special attention to the legs, flanks, barrel, topline and other body areas commonly attacked by those flies. Repeat daily as needed.	
Face Flies	Apply using spray that produces large wetting droplets. Apply to the face of the animal in the morning before moving it to pasture. Apply sufficiently to wet the face, but not more than 1.5 ounces per animal. Do not get into eyes, nose or mouth. Repeat daily as needed.	
Poultry Lice	Spray roosts, nests, walls and cages thoroughly, followed by spraying over the birds with a fine mist.	
Bed Bugs and Mites (including Northern fowl mite) in poultry houses	Spray crevices of roost poles, cracks in nests and walls where the Mites & Bed Bugs hide. Spray birds with a fine mist paying particular attention to vents. Use at the rate of 1 gallon of spray per 100 birds.	
Sheep "Tick" or Ked	Thoroughly wet all parts of the animal's body by dipping or spraying with sufficient pressure to penetrate the wool. Treat at a rate sufficient to wet the animal.	
Meal Worms, Darkling Beetles	Apply as a fine mist or fog, directing the spray toward the upper corners and ceiling until the area is filled with mist. Use about 2 ounces per 1,000 cubic feet of space. For	

9/12

	best results, close windows and doors before spraying. Vacate after treatment and keep area closed for 10 to 15 minutes. Ventilate area before reentering the area.	
Horn Flies, Face Flies, Horseflies, Ear Ticks	Back rubber— make sure the back rubber stays filled.	Dilute 8 oz. in 5 gallons oil.
Ticks (including deer ticks, which carry Lyme disease) Blowflies, Hog Lice	Spray, dip, or sponge to apply 1 pint per animal, especially around ears.	Dilute 1.28 oz. per gallon of water (1 part <i>Pramex 10-10</i> concentrate to 100 parts water). This makes a 0.10% permethrin ready-to-use product.
Poultry Mites, Northern Fowl Mites and Lice	At the rate of 1 gallon per 100 birds, spray with a fine mist. Spray walls, roosts, cages and nests.	
Fleas, Flies, Ticks, Lice and Mange Mites (adults and larvae) in doghouses, kennels, shelters, yards and runs	Before treating, spray fabric in an inconspicuous area to test for possible staining or discoloration. Inspect again after drying. If no staining occurs, thoroughly spray infested areas, pet beds, resting quarters, nearby cracks and crevices, along and behind baseboards, moldings, window and doorframes and localized areas of floor and floor coverings (rugs and carpets). Fresh bedding should be placed in animal quarters once spray has dried. Adult fleas and larvae contacted by spray will be killed. Do not treat cat bedding.	For initial clean up of severe insect infestation, dilute at a rate of 1 part <i>Pramex 10-10</i> concentrate in 19 parts water (6.4 fluid ounces/gallon). This makes a 0.5% permethrin ready-to-use product. For normal infestations, dilute 1 part <i>Pramex 10-10</i> concentrate in 39 parts water (3.2 ounces per gallon). Makes a 0.25% permethrin ready-to-use product. For maintenance use, dilute 1 part concentrate in 100 parts water (1.28 ounces/ gallon or 8 teaspoons/gallon). Makes a 0.1% permethrin ready-to-use product.
Fleas, Ticks, Lice and Mange Mites (adults and larvae) on dogs and livestock	Thoroughly wet the animal by spraying, dipping or sponging. Do not rinse or towel dry; allow animal to air dry in a warm place. Gives long lasting protection against re infestation. Repeat applications at intervals of 2 to 3 weeks. Do not treat cats or their bedding. Do not treat puppies less than twelve weeks old. Pet sensitivities may occur after using ANY pesticide product. If you see signs of sensitivity bathe your pet with mild soap and rinse with large quantities of water. If signs continue, consult a veterinarian immediately. If you have a debilitated, aged, medicated, pregnant or nursing animal, consult a veterinarian before using this product.	For clean up of severe insect infestation, dilute at a rate of 1 part concentrate in 100 parts water (1.28 ounces per gallon or 8 teaspoons/gallon). Makes a 0.1% permethrin ready-to-use product. For normal infestations, dilute 1 part concentrate in 200 parts water (0.64 ounces per gallon or 4 teaspoons/ gallon). Makes a 0.05% ready-to-use product. For maintenance use, dilute 1 part concentrate in 400 parts water (0.32 ounces per gallon or 2 teaspoons/gallon). This will make a 0.25% permethrin ready-to-use product.

FOR DAIRY CATTLE: Spray lactating dairy cows only after milking is complete.

FOR SWINE: Do not ship animals for slaughter within 5 days of last treatment.

DIRECTIONS FOR USE IN COMMERCIAL ANIMAL PREMISE AUTOMATIC MISTING AND ULTRASONIC SPRAYING SYSTEMS:

In animal quarters, poultry houses, swine housing, warehouses, dairy barns, beef barns, stables, zoos and other listed livestock or animal housing areas.

TO KILL Flies, including Houseflies, Deer Flies, Horn Flies, Stable Flies, Horse Flies, Mosquitoes, including the Culex species that may carry and transmit the West Nile virus and [Eastern] [Western] [And] St. Louis Equine Encephalitis, Hornets, Wasps, Yellow Jackets, Gnats, Small Flying Moths, Earwigs, Fleas, Ticks, Fire Brats Crickets, Cockroaches, Silverfish, Spiders and other listed insects.

10/12

Do not apply when food, feed or water is present. Do not apply directly to non-domestic/commercial (livestock) animals.

When using this product, installers and service technicians must comply with the license, certification, or registration requirements of the state(s), tribe(s) or local authority(ies) where they are installed.

When applying via remote activation device, do not apply when people and pets are present. If possible, when applying via automatic timer, set the timing for application when people and pets are unlikely to be present.

Direct nozzles to spray towards the target area and away from areas where people are typically present. The pesticide container must be locked.

Do not use in misters located within 3 feet of air vents, air conditioner units or windows. Do not use in an evaporative cooling system.

If used in a system with a reservoir tank for the end use dilution, the system reservoir tank must be locked. Securely attach the end use pesticide label and dilution statement to the system reservoir tank in a weather protected area or plastic sleeve. The dilution statement use be phrased as follows: this container holds ___ parts Pramex 10-10 to ___ parts water.

If used in a direct injection system, the pesticide container must be locked. Securely attach the end use label to the pesticide container in a weather protected area or plastic sleeve.

This product must only be used in systems that have been calibrated to apply no more than the maximum application rate of 0.008 lbs piperonyl butoxide per 1000 cu. ft. per day. This represents 1/2 gallon of Pramex 10-10 (diluted to 0.18% permethrin and 0.18% piperonyl butoxide) per 1000 cubic feet per day or 1 gallon of Pramex 10-10 (diluted to 0.09% permethrin and 0.09% piperonyl butoxide per 1000 cubic feet per day.

Mix 1/2 gallon (64 fluid ounces) of *Pramex 10-10* concentrate in 55 gallons of water to yield a solution of 0.09% Permethrin and 0.09% Piperonyl Butoxide. When treating areas with high insect populations or insects that are difficult to control, mix up to 1 gallon of concentrate in 55 gallons of water [1/2 gallon of concentrate in 27.5 gallons of water] to yield a solution of 0.18% Permethrin and 0.18% Piperonyl Butoxide.

For Tanks: To obtain the desired solution, partially fill the system reservoir tank with water, add concentrate to tank, and then add water to obtain desired dilution.

System nozzles should be set to deliver a rate of 1.25 fluid ounces of solution per minute, with one nozzle covering 100 square feet. The nozzles should deliver fine particle size droplets like those of a mist or an aerosol. Set the system timer to operate in accordance with equipment directions.

DIRECTIONS FOR USE IN OUTDOOR RESIDENTIAL MISTING SYSTEMS:

[NOTE: NOT REGISTERED for use in Automatic ULV Spraying Systems in the State of New York.]

Use *Pramex 10-10* to control or temporarily reduce annoyance from accessible stages of: Mosquitoes including the Culex species that may carry and transmit the West Nile virus and [Eastern] [Western] [And] St. Louis Equine Encephalitis, Flies, House Flies, Gnats, Deer Flies, Horse Flies, Hornets, Wasps, Yellow Jackets, Fire Brats, Small Flying Moths, Earwigs, Fleas, Ticks including species that may carry or transmit Lyme Disease, Cockroaches, Crickets, Spiders, Silverfish, Asian Lady Beetles, and other nuisance insects.

When using this product, installers and service technicians must comply with the license, certification, or registration requirements of the state(s), tribe(s), or local authority(ies) where they are installed.

Do not apply this product when people, pets and food or drink are present.

Do not use in an evaporative cooling system.

Direct nozzles to spray towards the target area and away from swimming pools, water bodies or eating and cooking areas.

Do not set nozzles to direct mist near outside air condition systems or other home air intakes.

If used in a system with a reservoir tank for the end use dilution, the reservoir tank must be locked. The end use pesticide label and the dilution statement must be securely attached to the system reservoir tank in a weather protected area or plastic sleeve. The dilution statement must be written as follows: "This container holds ___ parts Pramex® 10-10 Concentrate for Misting Systems to ___ parts water."

If used in a direct injection system, the pesticide container must be locked. Securely attach the end use label to the pesticide container in a weather protected area or plastic sleeve.

If the system works on an automatic timer, set the timing for application when people, pets and/or food are unlikely to be present.

If the system works when a person operates a remote activation device, then application of this pesticide when people, pets and/or food are present is prohibited.

Contact the system manufacturer for guidance or assistance to ensure compliance with the following requirement:

This product may only be used in systems that have been calibrated to apply no more than the maximum application rate of 9.5 fl. oz. of 0.09% synergized permethrin solution per 1,000 cubic feet per day.

Mix 1/2 gallon (64 fluid ounces) of Pramex 10-10 concentrate in 55 gallons of water to yield a solution of 0.09% Permethrin and 0.09% Piperonyl Butoxide. When treating areas with high insect populations or insects that are difficult to control, mix up to 1 gallon of concentrate in 55 gallons of water [1/2 gallon of concentrate in 27.5 gallons of water] to yield a solution of 0.18% Permethrin and 0.18% Piperonyl Butoxide.

For Tanks: To obtain the desired solution, partially fill the system reservoir tank with water, add concentrate to tank, and then add water to obtain desired dilution.

The system nozzles should deliver fine particle size droplets like those of a mist or an aerosol.

Automatic spraying system dilution table

"X" Tank Size (in gallons)	"Y" Conversion Factor (Fluid ozs. of Pramex 10-10 Concentrate/Gallon of water)	"X" times "Y"= How many fluid ozs. of concentrate should be mixed with water for the tank size specified** (Ex.: a 15 gallon tank x 1.16. needs 17.4 ozs. of Pramex 10-10 per 15 gallons of water)
1	1.16	1.16
15	1.16	17.4
20	1.16	23.2
30	1.16	34.8
55	1.16	63.8

**will make a 0.09% synergized permethrin solution

INSTRUCTIONS FOR REFILLING A PARTIALLY FILLED TANK: When refilling a partially filled tank: calculate the amount of additional solution (in gallons) required to fill the tank to the desired level. Multiply the number of gallons required to refill tank times 1.16 to determine the amount of this concentrate to add when refilling (to achieve 0.09% synergized permethrin solution).

STORAGE AND DISPOSAL

Do not contaminate water, food or feed by storage or disposal.

PESTICIDE STORAGE: Store upright at room temperature. Avoid exposure to extreme temperatures.

12/12

CONTAINER DISPOSAL: Non-refillable container. Do not reuse or refill this container. Clean container promptly after emptying. Triple rinse as follows: Empty the remaining contents into application equipment or a mix tank and drain for 10 seconds after the flow begins to drip. Fill the container 1/4 full with water and recap. Shake for 10 seconds. Pour rinsate into application equipment or a mix tank or store rinsate for later use or disposal. Drain for 10 seconds after the flow begins to drip. Repeat this procedure two more times. Offer for recycling if available or reconditioning if appropriate, or puncture and dispose of in a sanitary landfill, or by other procedures approved by state and local authorities.

IMPORTANT: READ BEFORE USE

Read the entire Directions for Use, Conditions, Disclaimer of Warranties and Limitations of Liability before using this product. If terms are not acceptable, return the unopened product container at once.

By using this product, user or buyer accepts the following conditions, disclaimer of warranties and limitations of liability.

CONDITIONS: The directions for use of this product are believed to be adequate and must be followed carefully. However, it is impossible to eliminate all risks associated with the use of this product. Ineffectiveness or other unintended consequences may result because of such factors as weather conditions, presence of other materials, or the manner of use or application, all of which are beyond the control of Valent BioSciences Corporation. All such risks shall be assumed by the user or buyer.

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[Or alternate text

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